



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,781	11/17/2003	Sheena May Loosmore	454313-3161.5	2429
20/999 7590 01/08/2009 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151				
EXAMINER				
MOSHER, MARY				
ART UNIT		PAPER NUMBER		
1648				
MAIL DATE		DELIVERY MODE		
01/08/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/714,781

Applicant(s)

LOOSMORE ET AL.

Examiner

Mary E. Mosher

Art Unit

1648

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1.5.6.10-22.30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1.5.6.10-22.30 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

In response to the amendments to the claims, the 102 rejections over Kinney et al, Yamshikov et al, and Chang et al are withdrawn. In addition, the 103 rejection over Kinney et al and the 103 rejection over Chang et al are both withdrawn. In response to applicant's arguments regarding unpredictability in the art and reasonable expectation of success, the 103 rejections based on the combination of Paoletti (Proc Natl Acad Sci USA, 1996, 93:11349-11353), Goverdhan et al. (Acta Virol, 1992, 36: 277-283) and Ostlund et al. (Vet Clin North Am Equine Pract, 2000, 16: 427-44, Abstract) are also withdrawn.

Claim Rejections - 35 USC § 103

Claims 1, 5, 6, 10-13, 15-18, 20, 30, and 31 remain rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Paoletti et al 5,744,141, Chang US2003/0022849, and Paoletti 5,505,941. Applicant argues that the references do not provide a suggestion of the claimed invention, motivation to combine, or expectation of success. Applicant argues that the '141 patent teaches that the response to recombinant vaccines can be unpredictable among flaviviruses, for example the vaccines encoding JEV proteins induced different responses than vaccines encoding Dengue type 2 proteins, and the DEN2 proteins often did not induce an immunoprotective effect. However, Chang teaches an immunoprotective effect of WNV DNA against WNV infection, using a single dose of naked DNA, see example 11. Although Chang does not explicitly state that the protective DNA construct encodes

WNV PrM-M-E, Chang does provide the nucleotide and amino acid sequence of the protective DNA in example 9, which the artisan can readily determine corresponds to the WNV preM-M-E polyprotein sequence. The teachings of Chang provide motivation to choose WNV as the flavivirus species for the poxvirus vectors of Paoletti, and also provide a reasonable expectation of success for the recombinant poxvirus-vectorized vaccine. Furthermore, in view of Chang's single-dose protection using a plasmid vector, applicant's single-dose protection using an avipox vector is not seen as unexpected. Therefore, it is maintained that the invention as a whole is obvious over the combined references.

Claims 21, 22 remain rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Paoletti et al 5,744,141, Chang US2003/0022849, and Paoletti 5,505,941 as applied to claims 1, 5, 6, 10-13, 15-18, 20, 30, and 31 above, and further in view of Ramshaw et al (Immunology Today 21:163-165, 2000), for reasons of record. Applicant's arguments are addressed above.

Claims 14, 19 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Paoletti et al 5,744,141, Chang US2003/0022849, and Paoletti 5,505,941 as applied to claims 1, 5, 6, 10-13, 15-18, 20, 30, and 31 above, and further in view of Audonnet et al WO 99/44633, for reasons of record. Applicant's arguments are addressed above.

Double Patenting

Claims 1, 5, 6, 10-22, 30, 31 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-

28, of copending Application No. 10679520, for reasons of record. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. Please note, since this is the later-filed of the two copending applications, a terminal disclaimer will be required even if no other rejections remain in effect in this application. See MPEP 804(I)(B)(1).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary E. Mosher whose telephone number is 571-272-0906. The examiner can normally be reached on varying dates and times; please leave a message.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mary E Mosher/
Primary Examiner, Art Unit 1648

1/5/09